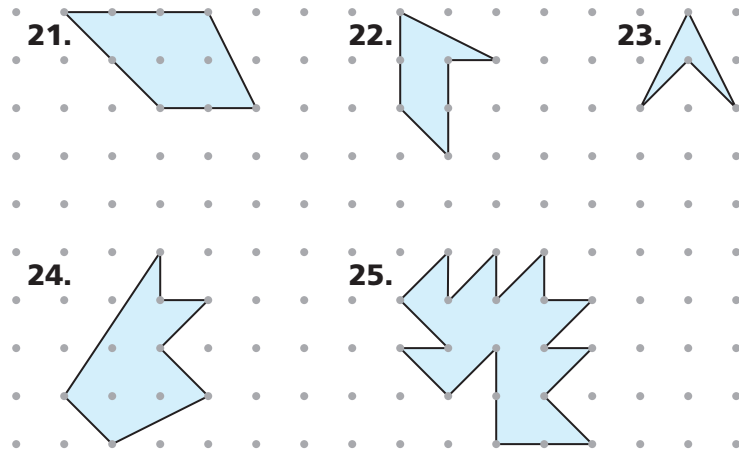


Find the area of each figure, and describe the method you use. Copy the figures onto dot paper if you need to.



## Connections

In the city of Euclid, the length of each block is 150 meters. Use this information and the map from Problem 1.1 for Exercises 26–28.

- 26.** What is the shortest driving distance, in meters, from City Hall to the animal shelter?
- 27.** What is the shortest driving distance, in meters, from the police station to the gas station?
- 28.** Between which two landmarks is the shortest driving distance 750 meters?
- 29.** When she solved Problem 1.2, Fabiola used slopes to help explain her answers.
  - a.** In Question A, she used slopes to show that adjacent sides of the figure were perpendicular. How might she have done this?
  - b.** In Question D, she used slopes to show that the figure was a parallelogram. How might she have done this?

**31.** Below are equations for eight lines.

line 1:  $y = 3x + 5$

line 3:  $y = 10 - 2x$

line 5:  $y = 7 + 3x$

line 7:  $y = 5 + 6x$

line 2:  $y = 0.5x + 3$

line 4:  $y = 1 - \frac{1}{3}x$

line 6:  $y = -2x + 1$

line 8:  $y = 3x$

**a.** Which of the lines are parallel to each other?

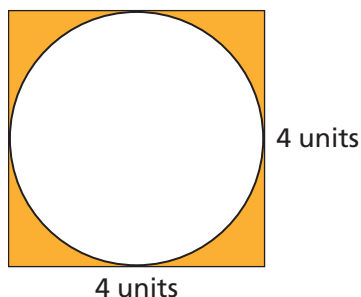
**b.** Which of the lines are perpendicular to each other?

**32.** Marcia finds the area of a figure on dot paper by dividing it into smaller shapes. She finds the area of each smaller shape and writes the sum of the areas as  $\frac{1}{2} \cdot 3 + \frac{1}{2} + \frac{1}{2} + 1$ .

**a.** What is the total area of the figure?

**b.** On dot paper, draw a figure Marcia might have been looking at.

**33.** In the figure, a circle is inscribed in a square.



**a.** Find the area of the circle.

**b.** Find the area of the shaded region.

**34.** Refer to the ordered pairs to answer the questions. Do *not* plot the points on a grid. Explain each answer.

$(2, -3)$

$(3, -4)$

$(-4, -5)$

$(4, 5)$

$(-4, 6)$

$(-5, -5)$

$(0, -6)$

$(6, 0)$

**a.** Which point is farthest right?

**b.** Which point is farthest left?

**c.** Which point is above the others?

**d.** Which point is below the others?